Applicant: Friedrich BOECKING

Docket No. R.306612

Preliminary Amdt.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Claims 1-10. (Canceled)

11. (New) A fuel injector for injecting fuel into a combustion chamber of an internal

combustion engine, the injector comprising,

an injector body, a nozzle holder, an injection valve member movably received in the

nozzle holder, the injection valve member having a seat that opens or closes injection

openings, a piezoelectric actuator, a first booster piston directly actuated by the piezoelectric

actuator, and a second booster piston guided in the first actuator piston and connected to the

injection valve member for varying the pressure inside a control chamber.

12. (New) The fuel injector as recited in claim 11, wherein the piezoelectric actuator is

received inside a pressure chamber, embodied in the injector body, which chamber is acted

upon via a high-pressure inlet by fuel at system pressure.

13. (New) The fuel injector as recited in claim 11, wherein the control chamber is defined by

a control chamber sleeve, an annular face of the first booster piston, an annular face of the

second booster piston, and a plane face of the nozzle holder.

Page 8 of 12

Applicant: Friedrich BOECKING

Docket No. R.306612 Preliminary Amdt.

14. (New) The fuel injector as recited in claim 12, wherein the control chamber is defined by

a control chamber sleeve, an annular face of the first booster piston, an annular face of the

second booster piston, and a plane face of the nozzle holder.

15. (New) The fuel injector as recited in claim 13, the control chamber sleeve is guided on

the first booster piston and is acted upon via a compression spring.

16. (New) The fuel injector as recited in claim 14, the control chamber sleeve is guided on

the first booster piston and is acted upon via a compression spring.

17. (New) The fuel injector as recited in claim 13, wherein the control chamber is sealed off

from the pressure chamber via a bite edge that cooperates with the plane face of the nozzle

holder.

18. (New) The fuel injector as recited in claim 15, wherein the control chamber is sealed off

from the pressure chamber via a bite edge that cooperates with the plane face of the nozzle

holder.

19. (New) The fuel injector as recited in claim 16, wherein the control chamber is sealed off

from the pressure chamber via a bite edge that cooperates with the plane face of the nozzle

holder.

Page 9 of 12

Applicant: Friedrich BOECKING

Docket No. R.306612 Preliminary Amdt.

20. (New) The fuel injector as recited in claim 11, further comprising a hydraulic chamber

between the first booster piston and the second booster piston, which hydraulic chamber

communicates hydraulically, via a compensation bore, with the pressure chamber inside the

injector body.

21. (New) The fuel injector as recited in claim 20, further comprising a spring element

resting a contact face and received inside the hydraulic chamber, the spring element urging

the injection valve member in the closing direction.

22. (New) The fuel injector as recited in claim 11, further comprising a nozzle chamber inlet

branching off from the pressure chamber and connecting the pressure chamber with the

nozzle chamber.

23. (New) The fuel injector as recited in claim 11, wherein the guidance of the injection

valve member inside the nozzle holder is effected in a guide portion and inside the injector

body by the booster pistons.

24. (New) The fuel injector as recited in claim 11, wherein the hydraulic chamber, which

communicates with the pressure chamber via a compensation bore, comprises a contact face

for the spring element, which contact face is braced in a recess of the second booster piston,

which piston has a first annular face that defines the hydraulic chamber.

Page 10 of 12